

WHAT IS CLAIMED IS:

1. A method of establishing a connection between a first computer of a
 5 first computer network and a resource of a second computer network via a third
 network, along a route through an intermediate system having an interface to the first
 computer network, and through a gateway intervening between the second computer
 network and the third network, the resource belonging to the domain of the gateway,
 b wherein the method comprises the following steps:
 10 - configuring the intermediate system with a tunnel from the intermediate system
 to the gateway;
 - mapping the tunnel with a requester and a domain name of the gateway;
 - the requester issuing a request for a connection from the first computer to the
 resource by specifying a name of the resource;

15 - receiving the request at the intermediate system via the interface;
 - using a rule for matching the name of the resource with the gateway;
 - mapping the name of the resource to the tunnel;
 - returning a temporary IP number to the first computer in answer to the request;
 - mapping the temporary IP number to the name of the resource;

20 - the gateway administrating the handling of data packets such that data packets
 addressed by the first computer to the temporary IP number, arriving through
 b the tunnel, are routed to the resource; and
 - the gateway administrating the handling of data packets such that data packets
 arriving from the resource destined to the first computer, are routed through the
 25 tunnel to the first computer via the intermediate system.

b b 2. The method according to claim 1, wherein the method further
 comprising comprises the step of:
 30 - transmitting a message with the mapping of the temporary IP number to the
 gateway by means of the tunnel.

3. The method according to claim 1, wherein the step of the gateway administrating the handling of data packets such that data packets addressed by the first computer to the temporary IP number, arriving through the tunnel, are routed to the resource, comprises the substep of:

- directing the intermediate system to translate source addresses of data packets addressed to the temporary IP number to be sent through the tunnel.

4. The method according to claim 1, wherein the step of the gateway administrating the handling of data packets such that data packets addressed by the first computer to the temporary IP number, arriving through the tunnel, are routed to the resource, comprises the substep of:

- directing the intermediate system to translate destination addresses of data packets addressed to the temporary IP number to be sent through the tunnel, by means of at least a partial DNS function in the intermediate system.

5. The method according to claim 1, wherein the step of the gateway administrating the handling of data packets such that data packets addressed by the first computer to the temporary IP number, arriving through the tunnel, are routed to the resource, comprises the substep of:

- the gateway translating source addresses of data packets arriving through the tunnel addressed to the temporary IP number and routing these data packets to the resource.

25 6. The method according to claim 1, wherein the step of the gateway administrating the handling of data packets such that data packets addressed by the first computer to the temporary IP number, arriving through the tunnel, are routed to the resource, comprises the substep of:

- the gateway translating destination addresses of data packets arriving through the tunnel addressed to the temporary IP number and routing these data packets to the resource.

b 5 7. The method according to claim 1, wherein the step of the gateway administrating the handling of data packets such that data packets arriving from the resource destined to the first computer, are routed through the tunnel to the first computer via the intermediate system, comprises the substep of:

- the gateway translating source and destination addresses of data packets arriving from the resource destined to the first computer, and routing these data packets through the tunnel to the first computer via the intermediate system.

10 8. The method according to claim 1, wherein the step of the gateway administrating the handling of data packets such that data packets arriving from the resource destined to the first computer, are routed through the tunnel to the first computer via the intermediate system, comprises the substep of:

- directing the intermediate system to translate source and destination addresses of data packets arriving from the resource via the tunnel destined to the first computer.

15 20 9. The method according to claim 1, wherein the third network is a telecommunications network.

10 25 10. The method according to claim 1, wherein the third network is the Internet.

11. The method according to claim 1, wherein the rule for matching the name of the resource with the gateway is based on a mapping.

12. The method according to claim 1, wherein the rule for matching the name of the resource with the gateway is based on a list of hosts.

b 13. 5 The method according to claim 1, wherein the rule for matching the name of the resource with the gateway is based ~~on~~^{one of} ~~a~~^{or} regular ~~or~~^{and} wildcard expression.

14. 10 The method according to claim 1, wherein the rule for matching the name of the resource with the gateway is based on matching a domain name of the name of the resource with the domain name of the gateway.

b 15. b 16. ^{comprising} The method according to claim 1, ~~wherein the method further comprises~~ the step of:

- authenticating the requester at the first computer for access to the tunnel.

15 16. 20 The method according to claim 1, wherein the name of the resource corresponds to a second computer within the second computer network, the second computer belonging to the domain of the gateway and comprising the resource.

17. 25 The method according to claim 16, wherein the gateway administrating the handling of data packets such that data packets addressed by the first computer to the temporary IP number, arriving through the tunnel, are routed to the resource residing on the second computer.

18. 25 The method according to claim 16, wherein the gateway administrating the handling of data packets such that data packets addressed by the first computer to the temporary IP number, arriving through the tunnel, are routed to the resource, the resource residing on a proxy of the second computer.

19. The method according to claim 18, wherein the proxy to which the gateway routes data packets addressed by the first computer to the temporary IP number, is in dependence on an identity of the requester.

5 20. A device arranged to establish a connection between a first computer of a first computer network and a resource of a second computer network via a third network, along a route through the device having an interface to the first computer network, and through a gateway intervening between the second computer network and the third network, the resource belonging to ^a~~the~~ domain of the gateway ~~wherein~~ the ^b
b 10 device ^{comprising}~~comprises~~:

- means arranged to configure a tunnel from the device to the gateway,
- means arranged to map the tunnel with a requester and a domain name of the gateway,
- means arranged to receive a request, issued by the requester, via the interface for a connection from the first computer to the resource by specifying a name of the resource,
- means arranged to use a rule for matching the name of the resource with the gateway,
- means arranged to map the name of the resource to the tunnel,
- 20 - means arranged to return a temporary IP number to the first computer in answer to the request,
- means arranged to map the temporary IP number to the name of the resource,
- means arranged to cooperate with the gateway administrating the handling of data packets such that data packets addressed by the first computer to the temporary IP number, arriving through the tunnel at the gateway, are routed to the resource,^{and}
- 25 - means arranged to cooperate with the gateway administrating the handling of data packets such that data packets arriving from the resource destined to the first computer, are at the gateway routed through the tunnel to the first computer via the device.